In the Claims:

Please amend the claims pursuant to 37 CFR 1.121 as follows:

Claims 1 – 9 (previously canceled);

Claim 10 (currently amended): A method for measuring parameter of a semi-conductor multi-layered material during the building up of the layers during epitaxy under constant processing conditions ~~the absolute wafer (process) temperature and composition of layers~~, comprising the steps of

illuminating the multi-layered material ~~a layer during epitaxy under constant processing conditions with a constant~~ with illuminating energy ; ~~and~~

measuring the reflectivity of the ~~layer~~ multi-layered material over time, the reflectance measurements being in the visible range;

~~to determine~~ determining a position ~~and~~ of an extreme value ~~a value of an extremum~~ of Fabry-Perot oscillations of the ~~layer~~ layers; and ~~then~~

comparing the determined position of the extreme value ~~of and the value of the extremum~~ to a standard.

Claim 11 (canceled)

Claim 12 (canceled)

Claim 13 (canceled)

Claim 14 (previously presented): The method of claim 10, wherein the measured reflectivity is related to the reflectivity of a reference material, on which at least one layer of the reference material is built up.

Claim 15 (previously presented): The method of claim 14, wherein the measured reflectivity is normalized.

Claim 16 (previously presented): The method of claim 10, wherein at the end of a process step or of the whole process, a layer of the same material as a substrate material, on which at least one layer is built up, is washed and its characteristics are compared with the characteristics present at the start of the process.

Claim 17 (previously presented): The method of claim 10, wherein the material properties are monitored at the same time, at least before the start and after the end of the process by an RAS measurement.

Claim 18 (previously presented): The method of claim 10, wherein the reflectivity at the position and the value of the extremum of the Fabry-Perot oscillations under consideration is used to determine the process temperature.

Claim 19 (previously presented): The method of claim 10, wherein the process time up to the position and the value of the extremum of the Fabry-Perot oscillations under consideration is used to determine the growth rate of the layers.

Claim 20 (currently presented): The method of claim 10, wherein a position and a value of an extremum of Fabry-Perot oscillations of a ternary layer under consideration is used to determine the composition of the layer.

Claim 21 (previously added): The method of claim 10, wherein the illumination energy is selected in a range, in which the temperature dependence of a real part of a dielectric function of participating materials is monotonic.